English

USER MANUAL

LED Bar 2 RGBA 252/10

CAUTION!
Keep this device away from rain and moisture!
Never open the housing!

For your own safety, please read this user manual carefully before you initially start-up.

Every person involved with the installation, operation and maintenance of this device has to
- be qualified
- follow the instructions of this manual
- consider this manual to be part of the total product
- keep this manual for the entire service life of the product
- pass this manual on to every further owner or user of the product
- download the latest version of the user manual from the Internet

INTRODUCTION

Thank you for having chosen a EUROLITE LED Bar 2 RGBA 252/10. If you follow the instructions given in this manual, we are sure that you will enjoy this device for a long period of time.

Delivery includes

1	Device
1	User manual

Unpack your device.

SAFETY INSTRUCTIONS

CAUTION!
Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Please make sure that there are no obvious transport damages. Should you notice any damages on the A/C connection cable or on the casing, do not take the device into operation and immediately consult your local dealer.

This device falls under protection-class I. The power plug must only be plugged into a protection class I outlet. The voltage and frequency must exactly be the same as stated on the device. Wrong voltages or power outlets can lead to the destruction of the device and to mortal electrical shock.

Always plug in the power plug last. The power plug must always be inserted without force. Make sure that the plug is tightly connected with the outlet.

Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution! Never touch them with wet hands, as this could lead to mortal electrical shock.

Never modify, bend, strain mechanically, put pressure on, pull or heat up the power cord. Never operate next to sources of heat or cold. Disregard can lead to power cord damages, fire or mortal electrical shock.

The cable insert or the female part in the device must never be strained. There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to mortal damage.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

If extension cords are used, make sure that the core diameter is sufficient for the required power consumption of the device. All warnings concerning the power cords are also valid for possible extension cords.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord. Otherwise, the cable or plug can be damaged leading to mortal electrical shock. If the power plug or the power switch is not accessible, the device must be disconnected via the mains.

If the power plug or the device is dusty, the device must be taken out of operation, disconnected and then be cleaned with a dry cloth. Dust can reduce the insulation which may lead to mortal electrical shock. More severe dirt in and at the device should only be removed by a specialist.

There must never enter any liquid into power outlets, extension cords or any holes in the housing of the device. If you suppose that also a minimal amount of liquid may have entered the device, it must immediately be disconnected. This is also valid, if the device was exposed to high humidity. Also if the device is still running, the device must be checked by a specialist if the liquid has reduced any insulation. Reduced insulation can cause mortal electrical shock.

There must never be any objects entering into the device. This is especially valid for metal parts. If any metal parts like staples or coarse metal chips enter into the device, the device must be taken out of operation and disconnected immediately. Malfunction or short-circuits caused by metal parts may cause mortal injuries.

HEALTH HAZARD!

Never look directly into the light source, as sensitive persons may suffer an epileptic shock (especially meant for epileptics)!

Keep away children and amateurs!

Never leave this device running unattended.

OPERATING DETERMINATIONS

This device is a lighting effect for creating decorative effects. This product is only allowed to be operated with an alternating voltage of 230 V, 50 Hz and was designed for indoor use only.

This device is designed for professional use, e.g. on stages, in discotheques, theatres etc.

Lighting effects are not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

Do not shake the device. Avoid brute force when installing or operating the device.

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

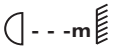
This device must never be operated or stockpiled in sourroundings where splash water, rain, moisture or fog may harm the device. Moisture or very high humidity can reduce the insulation and lead to mortal electrical shocks. When using smoke machines, make sure that the device is never exposed to the direct smoke jet and is installed in a distance of 0.5 meters between smoke machine and device. The room must only be saturated with an amount of smoke that the visibility will always be more than 10 meters.

The ambient temperature must always be between -5° C and +45° C. Keep away from direct insulation (particularly in cars) and heaters.

The relative humidity must not exceed 50 % with an ambient temperature of 45° C.

This device must only be operated in an altitude between -20 and 2000 m over NN.

Never use the device during thunderstorms. Over voltage could destroy the device. Always disconnect the device during thunderstorms.

The symbol  determines the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 0.1 meters.

This device is only allowed for an installation via the mounting bracket. In order to safeguard sufficient ventilation, leave 50 cm of free space around the device.

The housing must never touch surrounding surfaces or objects.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Always fix the fixture with an appropriate safety bond.

The maximum ambient temperature T_a = 45° C must never be exceeded.

Operate the device only after having become familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!

Never use solvents or aggressive detergents in order to clean the device! Rather use a soft and damp cloth.

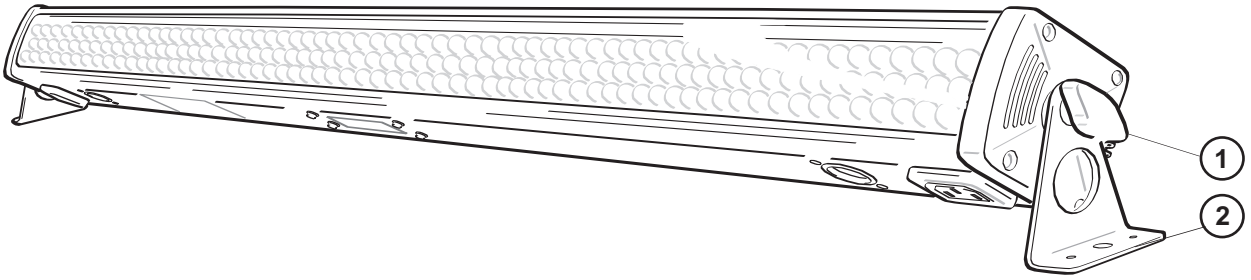
Please use the original packaging if the device is to be transported. Make sure that you pack the device in the original state.

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

Never remove the serial barcode from the device as this would make the guarantee void.

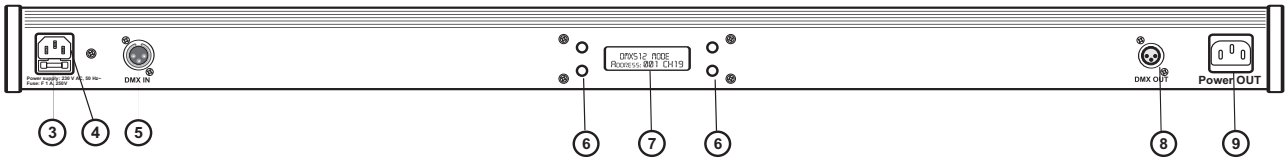
If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, crash etc.

DESCRIPTION OF THE DEVICE



(1) Fixation screw

(2) Mounting bracket



(3) Fuseholder

(4) Power supply

(5) DMX-In socket

(6) Programming buttons

(7) Display

(8) DMX-Out socket

(9) Power Out

INSTALLATION

The LED Bar 2 RGBA 252/10 can be installed on the ground or on the wall or ceiling.

Overhead rigging

DANGER TO LIFE!
Please consider the EN 60598-2-17and the respective national standards during the installation!
The installation must only be carried out by an authorized dealer!

The installation of the device has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.
The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four year in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

Procedure:
The device should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and.or damage to property.

The device has to be installed out of the reach of people.

If the device shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The device must never be fixed swinging freely in the room.

Caution: Devices may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do NOT install the device!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the device's weight.

DANGER OF FIRE!
When installing the device, make sure there is no highly-inflammable material (decoration articles, etc.) within a distance of min. 0.5 m.

Mount the device to your trussing system using appropriate clamps.

For overhead use, always install an appropriate safety bond.

You must only use safety bonds complying with DIN 56927, quick links complying with DIN 56927, shackles complying with DIN EN 1677-1 and BGV C1 carbines. The safety bonds, quick links, shackles and the carbines must be sufficiently dimensioned and used correctly in accordance with the latest industrial safety regulations (e. g. BGV C1, BGI 810-3).

Please note: for overhead rigging in public or industrial areas, a series of safety instructions have to be followed that this manual can only give in part. The operator must therefore inform himself on the current safety instructions and consider them.

The manufacturer cannot be made liable for damages caused by incorrect installations or insufficient safety precautions!

Pull the safety bond through the hole in the mounting-bracket and over the trussing system or a safe fixation spot. Insert the end in the quick link and tighten the safety screw.

The maximum drop distance must never exceed 20 cm.

A safety bond which already held the strain of a crash or which is defective must not be used again.

Adjust the desired inclination-angle via the mounting-bracket and tighten the fixation screws.

DANGER TO LIFE!
Before taking into operation for the first time, the installation has to be approved by an expert!

Attachment

Before attaching the device, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

The device must only be installed absolutely planar at a vibration-free, oscillation-free and fire-resistant location. Make sure that the device is installed absolutely planar by using a water-level.

The device must be installed out of the reach of people.

The device must always be installed via all fixation holes. Do only use appropriate screws and make sure that the screws are properly connected with the ground.

The durability of the installation depends very much on the material used at the installation area (building material) such as wood, concrete, gas concrete, brick etc. This is why the fixing material must be chosen to suit the wall material. Always ask a specialist for the correct plug/screw combination indicating the maximum load and the building material.

Procedure:

Step 1: The holes for the installation are on the mounting brackets.
Step 2: Hold the mounting brackets onto the location where the device is to be installed.
Step 3: Mark the boreholes with a pen or a suitable tool.
Step 4: Drill the holes.
Step 5: Hold the mounting brackets in the desired position and tighten it.

DANGER TO LIFE!
Before taking into operation for the first time, the installation has to be approved by an expert!

DMX-512 control

The wires must not come into contact with each other, otherwise the devices will not work at all, or will not work properly.

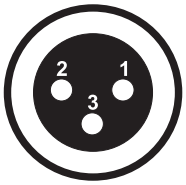
Please note, the starting address depends upon which controller is being used.

Only use a DMX-cable and 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

Occupation of the XLR connection:

DMX-output

XLR mounting-socket:



1: Ground
2: Signal (–)
3: Signal (+)

DMX-input

XLR mounting-plug:

1: Ground
2: Signal (–)
3: Signal (+)

If you are using controllers with this occupation, you can connect the DMX output of the controller directly with the DMX input of the first device in the DMX chain. If you wish to connect DMX controllers with other XLR outputs, you need to use adapter cables.

Building a serial DMX chain:
Connect the DMX output of the first device in the DMX chain with the DMX input of the next device. Always connect one output with the input of the next device until all devices are connected.

Caution: At the last fixture, the DMX-cable has to be terminated. Plug the terminator with a 120 Ω resistor between Signal (–) and Signal (+) in the DMX-output of the last fixture.

Connection between devices

On the rear panel, there is an IEC socket (Power Out). Connect the output with the input of the next fixture until all fixtures are connected.

Attention: It is recommended to renew the connection with the power mains after every **8** devices.

Connection with the mains

Connect the device to the mains with the enclosed power supply cable.

The occupation of the connection-cables is as follows:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	⏚

The earth has to be connected!

If the device will be directly connected with the local power supply network, a disconnection switch with a minimum opening of 3 mm at every pole has to be included in the permanent electrical installation.

The device must only be connected with an electric installation carried out in compliance with the IEC-standards. The electric installation must be equipped with a Residual Current Device (RCD) with a maximum fault current of 30 mA.

Lighting effects must not be connected to dimming-packs.

OPERATION

After you connected the EUROLITE LED Bar 2 RGBA 252/10 to the mains, the device starts running.

The LC display lights up and you see:

WELCOME
R.G.B.A.

You can now choose the desired settings via the buttons MODE, ENTER, UP and DOWN.

- STAND ALONE-MODE
- AUTO MODE
- DMX MODE
- MASTER/SLAVE MODE
- SOUND CONTROL MODE

Stand Alone-Mode

Chaser

A chaser is a sequence of different steps that will be called up one after another in a continuous loop. With the LED Bar 2 RGBA 252/10, you can select up to 13 different chasers.

Selecting a chaser

Press the MODE button to select the internal program mode. Select the desired chaser (01 – 13) via the UP or DOWN buttons (see following graphic).

Press the ENTER button to select speed and flash settings, respectively. You can select the desired values via the UP or DOWN buttons.

Speed from 00 to 99, increasing.

Flash from 00 to 99, increasing.

Please press the ENTER button to confirm and to exit the STAND ALONE Mode.

01 = Dimming *	R00 G00 B00 A00 F00
02 = Color jump	Speed 00 Flash 00
03 = Color fade	Speed 00 Flash 00
04 = Dreaming	Speed 00 Flash 00
05 = Color flow	Speed 00 Flash 00
06 = Overlap flow	Speed 00 Flash 00
07 = Color chase	Speed 00 Flash 00
08 = Multi color	Speed 00 Flash 00
09 = Fade flow	Speed 00 Flash 00
10 = Two flow	Speed 00 Flash 00
11 = One way	Speed 00 Flash 00
12 = Two way	Speed 00 Flash 00
13 = Two color	Speed 00 Flash 00

* = Not a Chaser, rather a possibility to individually set the color intensity of the singular colors. Flash setting is valid for all colors equally, from 00 to 99, increasing.

Auto Mode

In Auto Mode the chasers are called up automatically in a continuous loop.

Press the MODE button to select the AUTO mode.

Press the ENTER button to select the desired frequency of the loops.

The desired frequency of the loops (Frequency = FQN 01-99) can be selected via the UP or DOWN buttons.

Please press the ENTER button to confirm and to exit the AUTO Mode.

DMX Mode

The Control Board allows you to assign the DMX fixture address, which is defined as the first channel from which the LED Bar 2 RGBA 252/10 will respond to the controller.

Controlling:
After having addressed the LED Bar 2 RGBA 252/10, you may now start operating it via your lighting controller.

Note: It's necessary to insert the XLR termination plug (with 120 Ohm) in the last lighting in the link in order to ensure proper transmission on the DMX data link.

Addressing

Press the MODE button until the display shows DMX512 MODE.

Press the ENTER button and the display shows: 001.

Set the desired address via the UP or DOWN buttons.

Please press the ENTER button again to confirm and to select a DMX Channel Mode.

DMX Channel Selection : Choosing a DMX Channel Mode up to 19 Channal Occupation

After having set the desired addresses and pressed ENTER, you can now choose a DMX Channel Mode. (4 CH, 6 CH, 19 CH).

Set the desired mode via the UP or DOWN buttons.

Press the ENTER button again to confirm and to exit the DMX Mode.

Please see the following DMX protocol graphics for the respective channel values.

4-Channel Mode:

CH 1	CH 2	CH 3	CH 4
Red (**0 - 255**)	Green (**0 - 255**)	Blue (**0 - 255**)	Amber (**0 - 255**)

6-Channel Mode:

CH 1	CH 2	CH 3	CH 4	CH 5	CH 6
Red (**0 - 255**)	Green (**0 - 255**)	Blue (**0 - 255**)	Amber (**0 - 255**)	Master Dimmer (**0-255**)	**0**: On
					1 - 5: Sound control
					6 - 10: On
					11 - 255: Flash

19-Channel Mode: (Default)

CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15	CH16	CH17	CH18	CH19
0-5 Blackout																		
6-10 Dimmer	0-255 All Dimm	0-255 Flash	0-255 R	0-255 G	0-255 B	0-255 A												
11-15 Dimmer	0-255 All Dimm	0-255 Flash	0-255 R1	0-255 G1	0-255 B1	0-255 A1	0-255 R2	0-255 G2	0-255 B2	0-255 A2	0-255 R3	0-255 G3	0-255 B3	0-255 A3	0-255 R4	0-255 G4	0-255 B4	0-255 A4
16-20 R	0-255 Dimmer	0-255 Flash																
21-25 G	0-255 Dimmer	0-255 Flash																
26-30 B	0-255 Dimmer	0-255 Flash																
31-35 A	0-255 Dimmer	0-255 Flash																
36-40 RA	0-255 Dimmer	0-255 Flash																
41-45 RG	0-255 Dimmer	0-255 Flash																
46-50 RB	0-255 Dimmer	0-255 Flash																
51-55 GB	0-255 Dimmer	0-255 Flash																
56-60 AB	0-255 Dimmer	0-255 Flash																
61-65 AG	0-255 Dimmer	0-255 Flash																
66-70 RGB	0-255 Dimmer	0-255 Flash																
71-75 RGA	0-255 Dimmer	0-255 Flash																
76-80 RBA	0-255 Dimmer	0-255 Flash																
81-85 GBA	0-255 Dimmer	0-255 Flash																
86-90 RGBA	0-255 Dimmer	0-255 Flash																
91-100 Color jump	0-255 Speed	0-255 Flash																
101-110 Color fade (in/out)	0-255 Speed	0-255 Flash																
111-120 Color dream	0-255 Speed	0-255 Flash																
121-130 Color flow	0-255 Speed	0-255 Flash																
131-140 Overlap flow	0-255 Speed	0-255 Flash																
141-150 Color chase	0-255 Speed	0-255 Flash																
151-160 Multi color	0-255 Speed	0-255 Flash																
161-170 Fade flow	0-255 Speed	0-255 Flash	0-255 Color select															
171-180 2 flow	0-255 Speed	0-255 Flash	0-255 Color select	0-255 Color select														
181-190 1 direction	0-255 Speed	0-255 Flash	0-255 Color select	0-255 Color select														
191-200 2 directions	0-255 Speed	0-255 Flash	0-255 Color select	0-255 Color select														
201-210 2 color flow	0-255 Speed	0-255 Flash	0-255 Color select	0-255 Color select														
211-255 Sound	0-255 Sensitivity																	

Master/Slave Mode

The master/slave-operation enables that several devices can be synchronized and controlled by one master-device.

On the rear panel of the LED Bar 2 RGBA 252/10 you can find an XLR-jack and an XLR-plug, which can be used for connecting several devices.

This device then works as master-device and controls the slave-devices, which are to be connected to the master-device via a stereo shielded cable. Connect the OUT-jack with the IN-plug of the next device.

Press the MODE button to select the SLAVE mode. The devices set in this manner can now be controlled by the master unit.

Please press the ENTER button to confirm and to exit the SLAVE Mode.

Sound Control Mode

Press the MODE button and choose Sound Controlled Mode (SOUND).

Press the ENTER button to select the desired sensitivity and frequency of the loops, respectively.

The desired sensitivity (Sensit 00-31) and frequency of the loops (Frequency = FQN 01-99) can be selected via the UP or DOWN buttons.

Please press the ENTER button again to confirm and to exit the SOUND Mode.

CLEANING AND MAINTENANCE

DANGER TO LIFE!

Disconnect from mains before starting maintenance operation!

We recommend a frequent cleaning of the device. Please use a soft lint-free and moistened cloth. Never use alcohol or solvents!

There are no servicable parts inside the device except for the fuse. Maintenance and service operations are only to be carried out by authorized dealers.

Replacing the fuse

If the fine-wire fuse of the device fuses, only replace the fuse by a fuse of same type and rating.

Before replacing the fuse, unplug mains lead.

Procedure:

Step 1: Open the fuseholder on the rear panel with a fitting screwdriver.
Step 2: Remove the old fuse from the fuseholder.
Step 3: Install the new fuse in the fuseholder.
Step 4: Replace the fuseholder in the housing.

Should you need any spare parts, please use genuine parts.

If the power supply cable of this device becomes damaged, it has to be replaced by a special power supply cable available at your dealer.

Should you have further questions, please contact your dealer.

TECHNICAL SPECIFICATIONS

Articles:	**51930418/51930443**	**51930419/51930444**
Power supply:	230 V AC, 50 Hz ~	230 V AC, 50 Hz ~
Power consumption:	41 W	41 W
Number of DMX channels:	4/6/19	4/6/19
DMX-512 connection:	3-pin XLR	3-pin XLR
Sound-control:	via built-in microphone	via built-in microphone
Maximum ambient temperature T_a:	45° C	45° C
Maximum housing temperature T_B:	50° C	50° C
Min. distance from flammable surfaces:	0.5 m	0.5 m
Min. distance to lighted object:	0.1 m	0.1 m
Fuse:	F 1 A, 250V	F 1 A, 250V
Number of 10mm LEDs:	252	252
Beam angle:	**20°**	**40°**
Dimensions:	1075 x 65 x 90 mm	1075 x 65 x 90 mm
Weight:	2 kg	2 kg

Please note: Every information is subject to change without prior notice. 31.03.2011 ©

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